PATENT
Customer No. 22,852
Attorney Docket No. 05725.0384-01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Christine RONDEAU

Application No.: 10/761,213

Filed: January 22, 2004

For: DYE COMPOSITION FOR KERATIN FIBRES, WITH A CATIONIC DIRECT DYE AND A SUBSTANTIVE POLYMER

Group Art Unit: 1751

Examiner: Margaret V. Einsmann

Confirmation No.: 2722

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

DECLARATION UNDER 37 C.F.R. § 1.132

I, Christine RONDEAU, do hereby make the following declaration:

1. I am a French citizen, residing at 10 bis, rue de Verdun, F-78500, Sartrouville, France;

2. I have been awarded a degree in Chemistry from Ecole Nationale Supérieure de Chimie de Toulouse .

3. I have been employed by L'ORÉAL since 1983, and I am presently employed as a Laboratory Supervisor at L'ORÉAL.

4. During my employment at L'ORÉAL, I have been engaged in research and development regarding hair dyeing;

5. I understand the rejections made in the Office Action dated May 26, 2004.

6. Given my education and experience, particularly in the area of hair dyeing, I consider myself able to provide the following testimony based on experiments conducted by me or under my direct supervision.

7. The following experiments were completed under standard laboratory conditions and compare a composition corresponding to the present invention with comparative Compositions A and B.

8. Evidence supporting the facts declared in paragraph 7 is as follows:

COMPARATIVE EXPERIMENTS

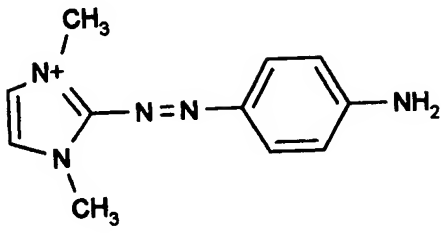
I. Preparation of Compositions

The following compositions were prepared:

Ingredients	Inventive Composition	Composition A	Composition B
Dye 1	0.09 g	0.09 g	-
Dye 2	-	-	0.11 g
Polymer 1	1 g AS	-	1 g AS
Polymer 2	-	1 g AS	-
Dodecylpolyglucoside	8 g	8 g	8 g
amino 2 methyl propanol 1	qs pH 9	qs pH 9	qs pH 9
Water	qsp 100 g	qsp 100 g	qsp 100 g

AS = active substance

- **Dye 1 : Cationic Direct Dye (Basic Orange 31)**



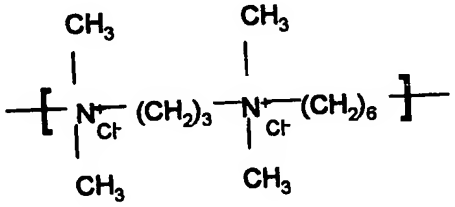
(I14)

- **Dye 2 : Neutral Direct Dye**

2,2'-[[4-[(4-aminophenyl)azo]-3-methylphenyl]imino]bis-ethanol (HC Yellow 7)

- **Polymer 1 : Hexadimethrine chloride**

The polymer comprises units of the following formula :



(IV)

- **Polymer 2 : Jaguar C13S**

This polymer corresponds to a quaternised hydroxypropylguar.

II. Testing Procedure

Each composition was applied onto locks of 90 % white natural hair and permed hair and left for 30 minutes at room temperature. The locks were then rinsed and dried with a hair dryer.

III. Results

The color of the hair was determined by using the L*a*b* system, with a Minolta 3600D spectrocolorimeter (10°, illuminant D65).

According to this system, L* indicates the lightness. The lower the value of L*, the more intense the color of the hair. The chromaticity coordinates are expressed by the parameters a* and b*, a* indicating the axis of red / green shades and b* the axis of yellow / blue shades.

ΔE, the color variation, is obtained from the following formula:

$$\Delta E = \sqrt{(L^* - L_0^*)^2 + (a^* - a_0^*)^2 + (b^* - b_0^*)^2}$$

wherein L* indicates lightness and a* and b* are the chromaticity coordinates of the locks after dyeing, whereas L_0^* indicates the lightness and a_0^* and b_0^* are the chromaticity coordinates of the locks before dyeing to determine color variation. The lower the value of ΔE, the less selective the color, yielding a homogenous color along the keratin fiber.

Composition	Inventive Composition	Composition A	Composition B
Color variation ΔE	4.1	11.9	15.1

The Inventive Composition exhibited a color variation of 4.1. This color variation is much lower than that shown by comparative Composition A (11.9) and comparative Composition B (15.1). As such, the Inventive Composition produces a more homogenous color along the keratin fiber as compared to Compositions A and B.

9. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated: October 15, 2004

By: Christine Rondeau .

Christine RONDEAU